


# City of Alexandria, Virginia

## MEMORANDUM

DATE: SEPTEMBER 30, 2003

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

THROUGH: PHILIP SUNDERLAND, CITY MANAGER

FROM: GARY A. MESARIS, FIRE CHIEF 

SUBJECT: LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) OVERVIEW

---

At the September 23, 2003 City Council Legislative Meeting, Councilman Rob Krupicka reported that he and the other members of the Local Emergency Planning Committee (LEPC) had recently been provided an update and overview of the LEPC and emergency management in the City of Alexandria. Mr. Krupicka requested that all members of City Council be provided a copy of the information presented.

Attached are copies of the presentation provided to the LEPC. Please let me know if additional information is desired or if I can be of further assistance.

Attachment: (10) Alexandria LEPC Overview

cc: Michele Evans, Assistant City Manager



# Alexandria LEPC - Local Emergency Planning Committee An Overview

Brian Ekeland  
September 26, 2003



9/26/2003



## Document Control

- **Author Name** – Brian Ekeland
- **Document Version number** – 1.1
- **Date** – September 24, 2003
- **Date for planned revision** – December 5, 2003
- **Location where this presentation is stored electronically** – home computer.

## Overview

- Mission and Scope
- Definition of Hazardous Materials
- Assumptions
- Who is the LEPC
- Alexandria demographics and hazard zones
- Management Control
- Role of Fire and Police Departments
- Notification and Evacuation
- IEMS – Integrated Emergency Management System





## Mission and Scope of the LEPC

### Mission

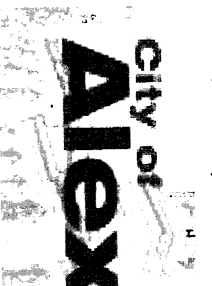
"It is the mission of the city government to comply with SARA Title III, and to develop plans, capabilities and procedures, and to be prepared to conduct coordinated emergency operations which will minimize the adverse effects on life, property and the environment in the event of a hazardous materials incident in Alexandria."

### Scope -What's included:

- **City government** - The plan applies to departments/activities of the city government, other persons under the emergency control of city officials, and to facilities subject to the provisions of SARA, Title III.
- **Links to other city plans** - The plan is closely related to the other city emergency operations plans. It is linked to fire and police procedures that cover responses to chemical spills and other types of HAZMAT releases.

### Scope - What's not included:

- **City department continuity plans**
  - Emergency response plans for individual city departments.
- **Plans for natural disasters** – floods, hurricanes, tornadoes, blizzards.
- **Attacks** - Hacker/Denial of Service attack.
- **Epidemic Response** – SARS, smallpox, flu, etc. managed by the Public Health Dept.



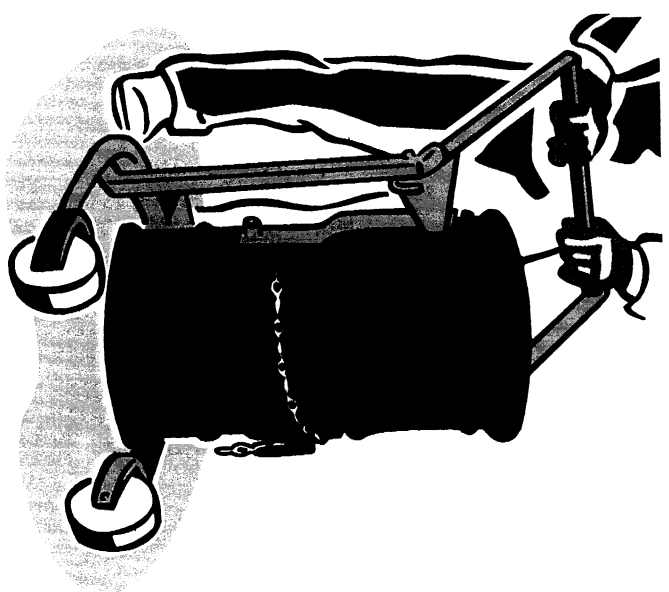
**Alexandria**  
VIRGINIA

## Hazardous Materials Defined

- **Hazardous Material** - A hazardous material is a material, including chemicals or biological agents, capable of producing harmful physical or health effects.
  - **Physical Effects** – Fire, sudden release of pressure, explosion and other violent reaction.
  - **Health Effects** – Acute conditions, burns, rashes, respiratory distress, convulsions, and possibly death. Chronic conditions develop after long term exposure to hazardous materials and include: cancers, nervous system disorders, and damage to other organ systems.

• Source – NOAA – National Oceanic and Aeronautic Association

9/26/2003



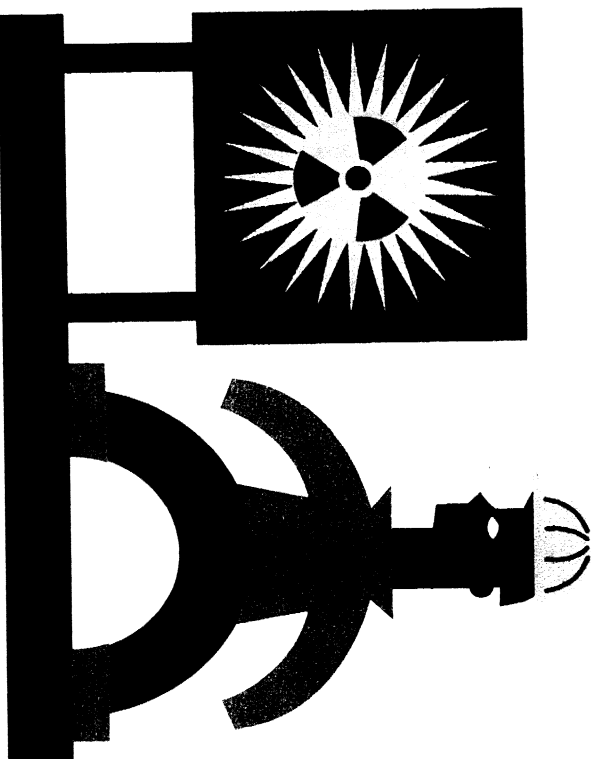


## Examples of Hazardous Materials

- Any hazardous material manufactured in the U.S. could be transported through Alexandria. Examples include:
- Combustible liquids or solids** – any liquid having a flashpoint > 100 degrees Fahrenheit and < 200 degrees.  
Ex – alcohols, antifreeze, fluid cleaners, acids.
- Compressed gases** – a substance in gas or liquid form contained in a vessel under pressure, including cylinders and aerosol cans.
- Designated chemicals** – **Toxic chemical agents** – damage a variety of human organ systems, **Carcinogens** – speed the development of tumors, **Mutagens** – chemicals that affect the human reproductive system.
- Etiologic (disease causing agents)** – any lab and veterinary wastes which contain human disease-causing agents as well as syringes, needles and sharps.
- Explosives** – any chemical compound, mixture or device that reacts or decomposes with substantial instantaneous release of gas and heat when subjected to sudden shock, pressure or high temperature. Ex – ammunition, dynamite, blasting caps, fireworks, propellants.
- Flammable liquids or solids** – any liquid exhibiting a flash point < 100 degrees Fahrenheit. Ex – gasoline, kerosene, petroleum products, propane solvents, ammonia, acetone
- Irritants** – materials that cause inflammation of the body surface with which they come in contact, or changes in the mechanics or respiration and lung functions. Ex – ammonia, alkaline dusts, halogens, hydrogen chloride, nitrogen dioxide, acetic acid, and formaldehyde.
- Oxidizing Materials** – a substance that readily yields oxygen or other electron acceptor to stimulate the combustion of organic matter (fuel).
- Poisons** – a substance so toxic that it presents a risk to life or health.
- Radioactive materials** – any material having a specific activity greater than .002 microcuries per gram (uCi/g).  
Ex – uranium, nuclear waste.

9/26/2003

Source – NOAA – National Oceanic and Aeronautic Association and DOT hazard classifications.





## Members of the LEPC:

### NUMBER OF MEMBERS 10

### TERM 2 YEAR TERM

### COMMENTS

- 2 Elected state and local officials
- 2 Representatives from law enforcement and firefighting personnel
- 2 Representatives of broadcast and print media
- 2 Representatives of community groups
- 2 Owners and operators of facilities subject to the federal emergency planning requirements of Super Fund Amendments and Reauthorization Act of 1986 (SARA)

### CITY STAFF CONTACT

CHARLES MCRORE  
Emergency Management Coordinator  
FIRE DEPARTMENT  
(703) 838-3825

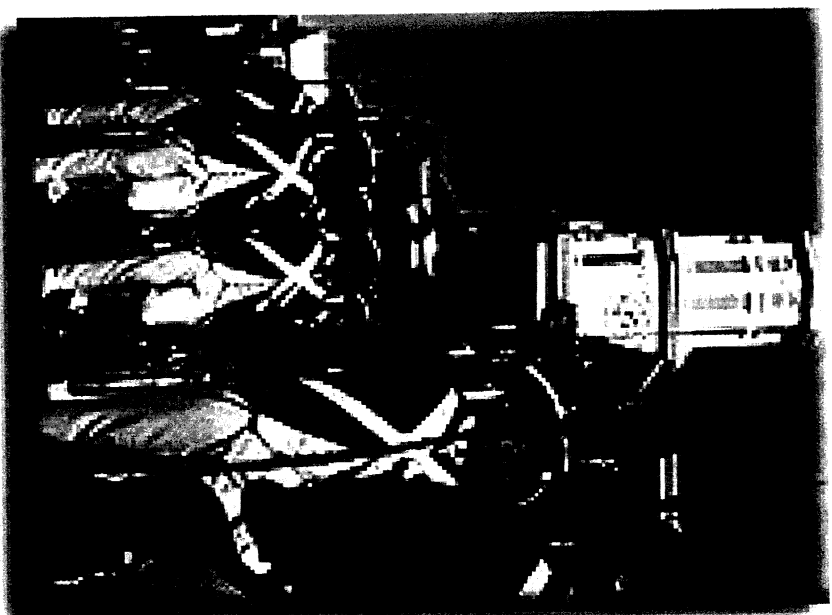
### Committee Members

- |     |                 |                              |
|-----|-----------------|------------------------------|
| 1.  | MARION BRUNKEN  | Citizen                      |
| 2.  | PETER CRAWFORD  | Police Captain               |
| 3.  | BRYAN DONNELLY  | Covanta – Waste Energy Plant |
| 4.  | HULA EDMONDS    | Mirant                       |
| 5.  | BRIAN EKELAND   | Communications               |
| 6.  | LUDWIG GAINES   | City Council                 |
| 7.  | ALAN HASKEL     | Communications               |
| 8.  | KAREN HELBRECHT | Citizen                      |
| 9.  | ROB KRUPICKA    | City Council                 |
| 10. | GARY MESARIS    | Fire Chief                   |



## Alexandria City Demographics

- **Residential Population** – 128,283
- **Households** – 61,889
- **2003 Operating Budget** - \$454M
- **Value of Real Property** - \$16 Billion
- **Economy** – Consists of distribution, retail, hotel, restaurants, service and professional, office-type enterprises. Light industry includes: repair shops, printing, packaging and transportation. No heavy industry.
- **Terrain** – Varies from sea level to 284 feet above sea level, covering approximately 16 square miles.
- **Water** – City water is supplied from a single utility from closed storage.
- **Public Transportation** – Metro and DASH.
- **Power** – Dominion Power
- **Climate** – There are no unusual weather or climate factors to report that would affect airborne distribution of chemicals.



## Alexandria Potential Hazard Zones

The city is vulnerable to transportation accidents that could rupture containers and emit gasses, liquids or particles by:

### Land

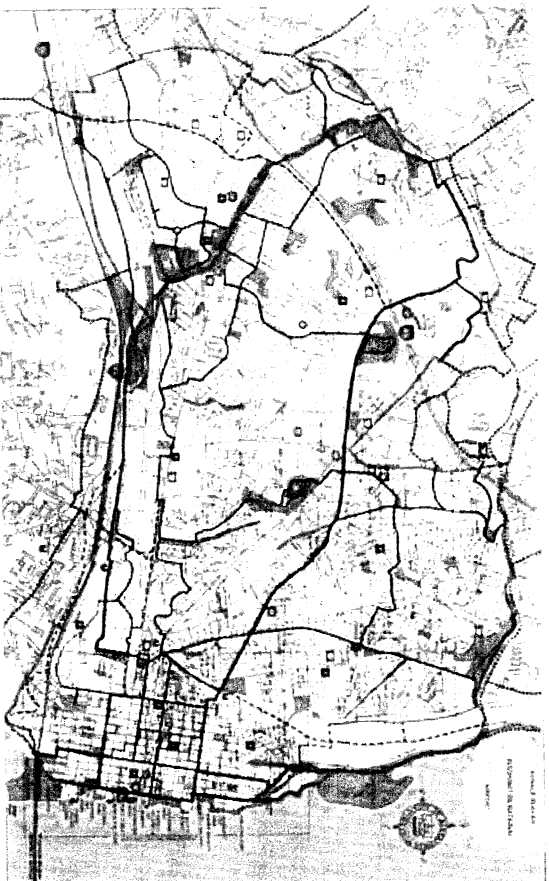
- **Highways** – Alexandria is on U.S. Route 1, a major north-south transportation artery, as well as Route 495 – the Capital Beltway, and Route 395.
- **Railroad tracks** – trains carry hazardous materials
- **Jet fuel pipeline** – Runs along railroad tracks from Newington to Reagan Airport.

### Sea

- **Seaport on the Potomac River** – hazardous materials can enter the city via the river.

### Air

- **Flight path to Reagan Airport** – the city lies adjacent to and along the flight path for both takeoff and landing.



## Plan Assumptions

- **Hazmat Event** - Hazardous Materials emergency may occur at any time and without warning along any transportation route; air, water, highway or railway, within the city.
- **Fire and Explosion** - Fire and explosion may result as well as emission of gases, liquids or particles.
- **City Services will respond to Hazmat events** - City emergency services will respond promptly and deal effectively with a hazardous material incident.
- **Mutual agreements are in effect** - adjacent jurisdictions of Arlington and Fairfax will provide Alexandria with assistance if required.
- **State and Federal Assistance** - Requires a longer response time and would be more helpful in a long range situation.
- **Emergency plans are linked** - The city's emergency operation plans and procedures will be implemented in the event of a disaster.
- **SARA** - Superfund Amendments and Reauthorization Act. The plan complies with the requirements of Title III, Emergency Planning and Community Right-to-Know, Public Law 99-499, October 17, 1986, Superfund Amendments and Reauthorization Act of 1986 (SARA.)

9/26/2003





## Management Control during an Emergency

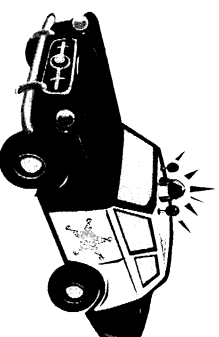
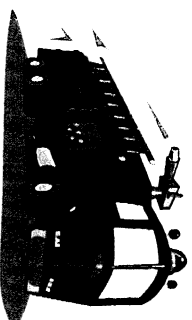
- **Fire Chief – Gary Mesaris**, the Fire Chief has operational control of the incident. Those units responding under a mutual aid agreement come under his command.
- **Visiting ranking fire or EMS officer –** Provides personnel and equipment support to the host jurisdiction.
- **City Manager –** The City manager is the director of emergency management and is responsible to the City Council for all emergency preparedness activities.
- **Community Emergency Coordinator**
  - Charlie McCrobie reports to the Fire Chief.
- **Incident Manager –** Normally the Fire Chief, this is the “on scene” commander.
- **Emergency Operations Center –**
  - **Fire EMS Training Academy –** Lee Center
  - **Alternate –** Fire HQ Building at 900 2nd St.





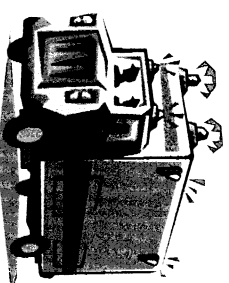
## Organizations that respond during an Emergency

- **Fire Department** – Fire suppression, explosion, hazardous materials and rescue, triage, care and transport for the injured.
- **Hazardous Materials Emergency Response Team** – Specially trained and equipped personnel of the Alexandria and Arlington Fire Departments serving under written agreement with the Virginia Department of Emergency Management.
  - Available 24 hours a day, with a 4 minute local response, and 30 minute regional response time from point of notification.
  - Team manages an area within 75 miles of Alexandria.
- **Police Department** – Law enforcement, security of the area, evacuation from the scene of the incident, traffic and crowd control, and accident investigation.
- **Transportation and Environmental Services** – Heavy equipment use, ditching, diking, debris removal and air monitoring.
- **Health Department** – Operating Casey Clinic, sanitary inspections, liaison with CDC, state health commissioner, and medical examiner.
- **Assistance as needed from:**
  - Volunteer agencies – Red Cross
  - Other jurisdictions – Arlington and Fairfax Level 1 - Strategic Control



American  
Red Cross

*Together, we can save a life*



9/26/2003



## Role of the Fire and Police Departments during an Emergency

### Fire Department

HAZMAT procedures - Implement internal HAZMAT procedures

Assume Control - Assume primary operational control for an emergency incident: fire, explosion, hazardous materials.

Work with Police - Support police units during evacuation

Dispatch Vehicle - Dispatch a vehicle to the on scene command post and coordinate with the Emergency Operations Center.

Decontaminate - Decontaminate exposed persons  
Monitor plume - Monitor the plume to determine its speed, direction and concentration.

Provide service for the rest of the city - Continue fire suppression, rescue and ambulance service for the remainder of the city.

Provide Education - Educate public and coordinate HAZMAT training.

Refer inquiries – Refer inquiries from the public to the Emergency Operations Center.

### Police Department

HAZMAT procedures - Implement internal HAZMAT procedures

Assume Control - Assume primary operational control for an emergency incident for: evacuation, security, traffic and crowd control, prevention of looting and re-occupancy.

Evacuation - Coordinate with Red Cross, Schools, Recreation and Fire Dept.

Evacuation Transportation – Call for DASH buses, school buses, Human Services STU (Special Transportation Unit) buses, Fast Tran (Fairfax City,) Metro buses

Terrorist activities – Coordinate investigations with FBI

Stray animals – Coordinate pick up and care of strays or pets of evacuees.

Provide law enforcement service for the rest of the city - Continue law enforcement for the remainder of the city.

Provide Education - Educate public and coordinate HAZMAT training.

Refer inquiries – Refer inquiries from the public to the Emergency Operations Center.



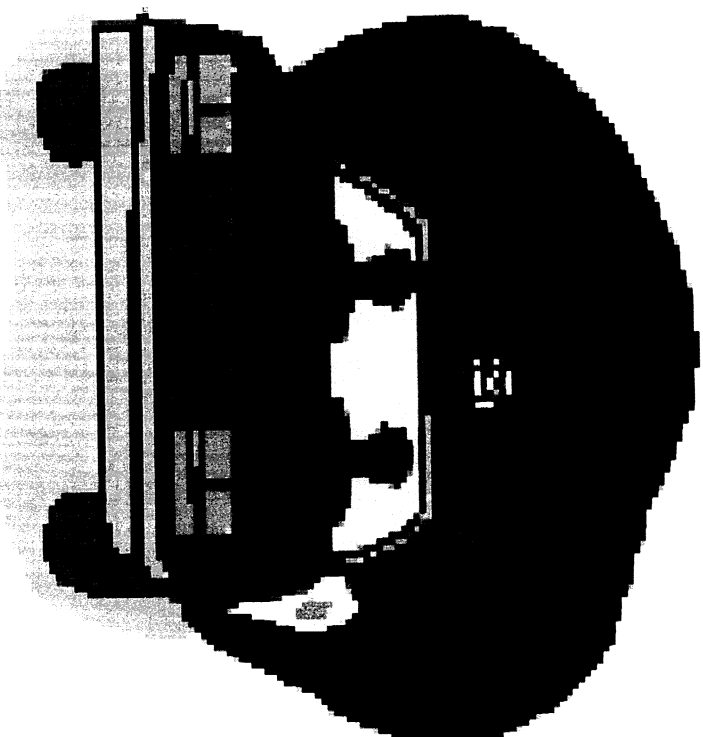
## Notification and Warning System

- **Fire and Police Communications** – Both the Fire and Police Departments have their own communications centers and are connected to the 911 system. They are the primary source for notification of a hazardous release from a facility or along a transportation route. They have internal paging systems to notify their personnel of a hazmat situation.
- **EAS – Emergency Alert System** – The City Manager and certain staff are authorized to use the EAS to warn and notify the public. EAS uses the NOAA weather radio, commercial radio, network and cable television to relay information as a two minute sound-bite or written scroll.
- **Siren Warning System** – This was dismantled in 1991.
- **Telephone Emergency Notification** – Used when up to 10,000 calls are required.
- **Emergency Public Information** – Public Information Officer will deal with the press and speak for the city manager.



## Evacuation

- **Evacuation** – The police will be in charge of alerting the population to evacuate. Police will drive cruisers through the streets with lights flashing and provide directions over the public address speakers and bull horns. Police will go door-to-door where necessary.
- **Evacuation vs. In-place Protection** – The Incident Commander makes a decision regarding evacuation. Police and Fire personnel follow their internal procedures for evacuation.







## Emergency Task Assignments

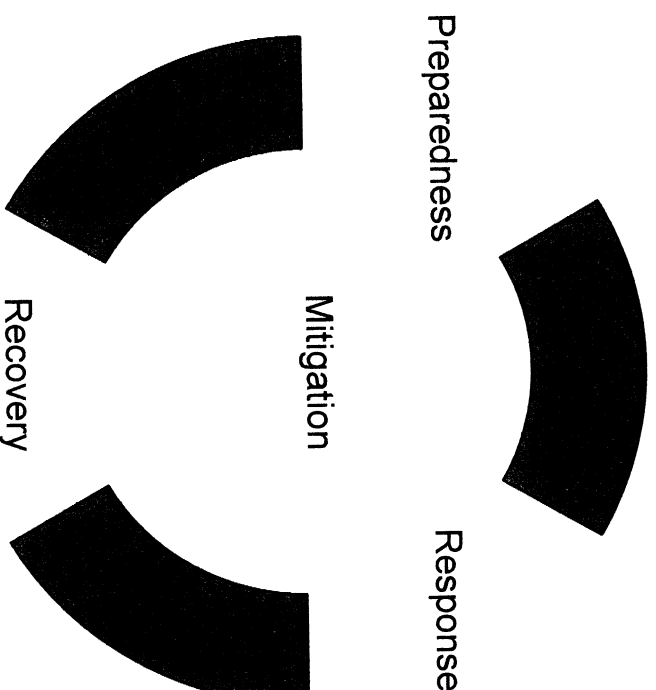
1. Adjacent Jurisdiction
2. Chemical Facilities
3. City Council
4. City Manager
5. Assistant City Manager
6. Citizen Assistance
7. City Attorney
8. Information Technology Services
9. Emergency Management Coordinator
10. Finance Department
11. Fire Department
12. General Services
13. Health Department
14. Housing
15. Human Services
16. Hospital
17. LEPC
18. Management and Budget
19. Mental Health
20. Personnel Services
21. Planning and Zoning
22. Police Department
23. Radio Amateur Civil Emergency Services (RACES)
24. Real Estate Assessment
25. Recreation, Parks and Cultural Activities
26. American Red Cross
27. Alexandria City Schools
28. Sheriff's Office
29. Transportation and Environmental Services
30. Utilities – Electricity, Gas, Water and Telephone
31. Virginia Emergency Response Council (VERC)

9/26/2003



## IEMS - Integrated Emergency Management System

- **Mitigation** – Activities designed to avoid or prevent emergencies from occurring, and to reduce ill effects of those that are unavoidable.
- **Preparedness** – The city is prepared to respond to emergencies through substantial planning and training efforts. Preparedness includes adequate supplies, equipment, facilities and dedicated personnel.
- **Response** – Time and speed are essential to response. Arrive at scene quickly and take decisive action to reduce the severity of the incident. Actions may include warning, evacuation, suppression, containment, rescue, apprehension, treatment, and in extreme cases, withdrawal for safety reasons.
- **Recovery** – Return to normal state of being. The city will give priority to recovery operations, including assessment of damage, restoration of essential facilities and utilities, provision for public and individual welfare, and return to normal community activities.

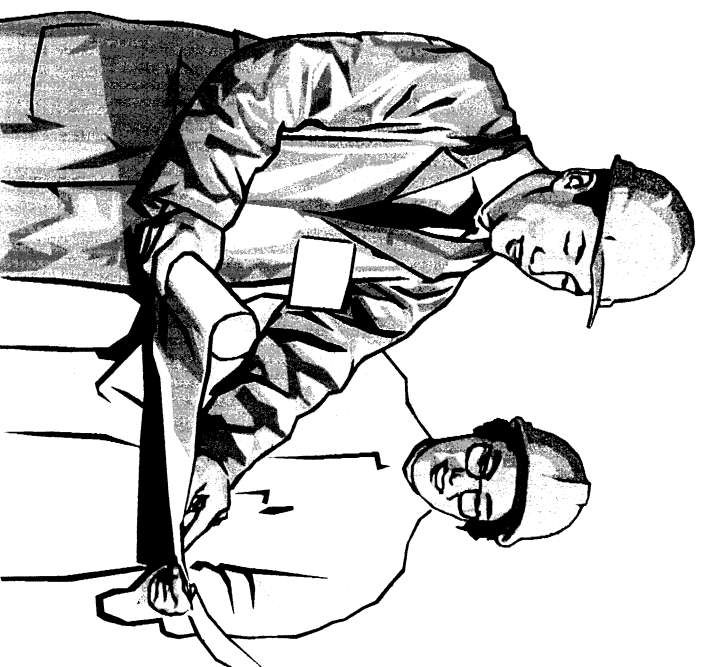




## IEMS – Mitigation (Prevention)

Avoid or prevent emergencies from occurring, and reduce the ill effects of those that are unavoidable.

- **Alexandria Fire Prevention Code** – enforce the code to prevent fires.
- **Building Codes** – ensure codes are followed for construction and renovations.
- **Flood Plain Management** – National Flood Insurance Program
- **Hazardous Chemical Removal** – remove hazardous chemicals or recommend changing the type of chemical used.





## IEMS – Preparedness (Planning)

### **Preparedness involves planning for emergencies.**

- **LEPC** – The Local Emergency Planning Committee meets to evaluate the emergency plan.
- **Plan No 71** – The Emergency Coordinator has created an Emergency Plan for the City of Alexandria.
- **Training** –
  - **Fire and Police Departments** - Offer both internal employee training and public outreach programs.
  - **Red Cross** – Disaster Education to volunteers and the public.
- **Exercises** – Drills ensure city employees are prepared.
  - **Biohazard Training** – 2003 winter drill at the Court House for a biohazard spill.
  - **Alexandria Hospital** – 2002 summer drill for emergency preparedness.



## IEMS - Response

Time and speed are essential elements of response.

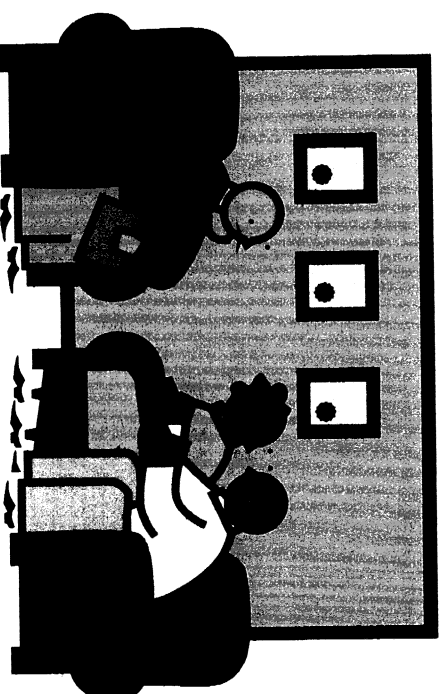
- **Fire** – Assumes primary operational control for an emergency incident: fire, explosion, hazardous materials.
- **Fire EMS** – The Emergency Medical Services team responds in concert with the Fire Dept.
- **Police** - Assume primary operational control for an emergency incident for: evacuation, security, traffic and crowd control, prevention of looting and re-occupancy.
- **Emergency Operations Center (EOC)** – The EOC is staffed 24 x 7 with employees who are trained to respond and manage hazardous events.



## IEMS - Recovery

Return citizens, property and environment to a normal state.

- **Physical** – Ensure citizens physical health and housing are adequate.
- **Mental** – Assess mental health of disaster victims accordingly, and provide counseling as required.
- **Economic** – Determine if disaster victims require economic aid.



## Summary

- Mission and Scope of LEPC
- Definitions of Hazardous Materials
- Planning Assumptions
- Members of the LEPC
- Alexandria demographics and hazard zones
- Management Control
- Role of Fire and Police Departments
- Notification and Evacuation
- IEMS – Integrated Emergency Management System

